

**What is claimed is:**

1           1.    A mobile phone comprising:  
2           a body including an engaging member;  
3           a front housing detachably disposed on the body via  
4           the engaging member;  
5           a rear cover detachably disposed on the body via the  
6           engaging member;  
7           a battery cover detachably disposed on the body,  
8           wherein the body is housed by the front  
9           housing, the rear cover, and the battery cover;  
10          and  
11          a battery pack, disposed on the body, including a  
12          projecting portion, wherein the projecting  
13          portion is abutted by the engaging member so as  
14          to move the engaging member.

1           2.    The mobile phone as claimed in claim 1, wherein  
2           the body includes a guide rail for the engaging member to  
3           move thereon.

1           3.    The mobile phone as claimed in claim 2, wherein  
2           the engaging member is formed with a concave portion, and  
3           the guide rail includes a protrusion corresponding to the  
4           concave portion, whereby the engaging member can be  
5           positioned at a predetermined position on the guide rail  
6           by engaging the protrusion with the concave portion.

1           4.    The mobile phone as claimed in claim 1, wherein  
2           the engaging member is formed with a groove, and the  
3           front housing includes a first hook corresponding to the

4 groove, wherein the front housing is positioned on the  
5 body by the first hook engaging with the groove.

1 5. The mobile phone as claimed in claim 1, wherein  
2 the engaging member is formed with a groove, and the rear  
3 cover includes a second hook corresponding to the groove,  
4 wherein the rear cover is positioned on the body by the  
5 second hook engaging with the groove.

1 6. The mobile phone as claimed in claim 1, wherein  
2 the projecting portion includes a first inclined surface  
3 abutted by the engaging member, and the engaging member  
4 includes a second inclined surface abutted by the  
5 projecting portion, whereby the engaging member can be  
6 smoothly moved by the battery pack.

1 7. The mobile phone as claimed in claim 1, wherein  
2 the battery cover includes a pressed member, and the body  
3 includes an elastic member corresponding to the pressed  
4 member, and the battery cover is positioned on the body  
5 by engaging the pressing member with the elastic member.

1 8. The mobile phone as claimed in claim 1, wherein  
2 the body is formed with a hole, and the front housing  
3 includes a fixed member, and the front housing is  
4 positioned on the body by engaging the fixed member with  
5 the hole.

1 9. The mobile phone as claimed in claim 1, wherein  
2 the shape of the front housing corresponds to those of  
3 the rear cover and the battery cover.

1           10. The mobile phone as claimed in claim 1, wherein  
2 the number of the engaging members is two, and a spring  
3 is disposed between the engaging members.

1           11. An assembly for assembling a mobile phone,  
2 wherein the mobile phone includes a body, a front  
3 housing, a rear cover, and the assembly comprises:

4           an engaging member disposed on the body in a manner  
5           such that the engaging member moves between a  
6           first position and a second position;

7           a first hook, corresponding to the engaging member,  
8           disposed on the front housing; and

9           a second hook, corresponding to the engaging member,  
10           disposed on the rear cover;

11           wherein the engaging member is engaged with the  
12           first hook and the second hook so that the  
13           front housing and the rear cover are combined  
14           with the body when the engaging member is  
15           located at the first position, and the engaging  
16           member is disengaged from the first hook and  
17           the second hook so that the front housing and  
18           the rear cover are separated from the body when  
19           the engaging member is located at the second  
20           position.

1           12. The assembly as claimed in claim 11, wherein  
2 the engaging member is formed with a concave portion, and  
3 the assembly includes a protrusion disposed on the body  
4 in a manner such that the protrusion corresponds to the  
5 concave portion, whereby the engaging member can be

6 positioned at a predetermined position on the body by  
7 engaging the protrusion with the concave portion.

1 13. The assembly as claimed in claim 11, wherein  
2 the engaging member is formed with a groove corresponding  
3 to the first hook and the second hook, and the front  
4 housing and the rear cover are positioned on the body by  
5 engaging the first hook and the second hook with the  
6 groove.

1 14. The assembly as claimed in claim 11, further  
2 comprising an abutting member, abutted by the engaging  
3 member, for positioning the engaging member.

1 15. The assembly as claimed in claim 14, wherein  
2 the abutting member includes a first inclined surface  
3 abutted by the engaging member, and the engaging member  
4 includes a second inclined surface abutted by the  
5 abutting member, whereby the engaging member can be  
6 smoothly moved by the abutting member.

1 16. The assembly as claimed in claim 11, wherein  
2 the first hook is integrally formed on the front housing.

1 17. The assembly as claimed in claim 11, wherein  
2 the second hook is integrally formed on the rear cover.

1 18. The assembly as claimed in claim 11, wherein  
2 the number of the engaging member is two, and a spring is  
3 disposed between the engaging members.